

5     DYNAMIC SOFTWARE CODE INSTRUMENTATION METHOD AND SYSTEM

ABSTRACT OF THE DISCLOSURE

          A method and system of monitoring code after being  
10   compiled or assembled is provided. Software code  
      instructions, such as a function preamble and/or a data  
      manipulation instruction, are identified using debug  
      information and then dynamically replaced with an  
      instruction that will branch execution to a scratchpad  
15   buffer. A routine is inserted into the scratchpad buffer,  
      and includes instruction(s) to generate output to a trace  
      buffer. Subsequent instructions in the scratchpad may  
      execute the replaced instruction(s) and branch back to the  
      address of the program code immediately following the  
20   original address of the replaced instruction.